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was generated using SuperScript RNase H reverse transcriptase (Gibco/BRL) and a primer complimentary to a sequence in the 3'-untranslated region of the human GRP78/BiP mRNA transcript (AB10230; 5'-TATTACAGCACTAGCAGATCAGTG-3') (SEQ ID NO:1). For PCR amplification, the forward primer AB10231 (5'-

CTTAAGCTTGCCACCATGAAGCTCTCCCTGGTGGCCGCG-3') (SEQ ID NO:2) contained a Kozak consensus sequence (bold) prior to the initiating ATG and a terminal *Hind*III restriction site (underlined). The reverse primer AB10232 (5'-

AGGCCTCGAGCTACAACTCATCTTTTCTGCTGT-3') (SEQ ID NO:3) contained a terminal XhoI restriction site (underlined) adjacent to the authentic termination codon of the GRP78/BiP cDNA. PCR reactions took place in a final volume of 50 µl containing 2 µl of the RT reaction, 100 ng of primers, 2.5 U Taq polymerase (Perkin-Elmer, Mississauga, ON) in a buffer consisting of 1.5 mM MgCl₂, 50 mM KCl, 10 mM Tris-HCl (pH 8.8) and 0.5 mM of each dNTP. All samples were subjected to amplification in a DNA thermal cycler 480 (Perkin-Elmer) with a step programme of 30 cycles of 94°C for 1 min, 58°C for 1 min, and 72°C for 1 min. The amplified GRP78/BiP cDNA was separated on a 0.8% agarose-TBE gel containing ethidium bromide, purified from the agarose gel using the QIAEX gel extraction kit (Qiagen, Mississauga, ON) and ligated into T-ended pBluescript (KS) (Stratagene, La Jolla, CA). The ligation mixture was then used to transform competent DH5α cells (Gibco/BRL). Plasmid DNA was isolated from transformed cells using the QIAEX miniprep kit (Qiagen), digested with HindIII and XhoI, and the GRP78/BiP cDNA insert purified from agarose. The GRP78/BiP cDNA insert was ligated into the HindIII/XhoI site of the mammalian expression vector pcDNA3.1(+) (Invitrogen, Carlsbad, CA) to produce the recombinant plasmid, pcDNA3.1(+)-GRP78/BiP. Authenticity of the GRP78/BiP cDNA sequence was confirmed by fluorescence-based double stranded DNA sequencing (MOBIX).

(NE DOGS paragraph: Please replace the paragraph beginning at page 46, line 3, with the following rewritten

SEQ ID NO:4

Human GRP78/BiP amino acid sequence

MKLSLVAAMLLLLSAARAEEEDKKEDVGTVVGIDLGTTYSCVGVFKNGRVEIIA NDQGNRITPSYVAFTPEGERLIGDAAKNQLTSNPENTVFDAKRLIGRTWNDPSVQ QDIKFLPFKVVEKKTKPYIQVDIGGGQTKTFAPEEISAMVLTKMKETAEAYLGKK Austin et al. Application No.: 09/834,760 Page 3 PATENT Attorney Docket No.: 19874-000410US

A2

VTHAVVTVPAYFNDAQRQATKDAGTIAGLNVMRIINEPTAAAIAYGLDKREGEK NILVFDLGGGTFDVSLLTIDNGVFEVVATNGDTHLGGEDFDQRVMEHFIKLYKK KTGKDVRKDNRAVQKLRREVEKAKRALSSQHQARIEIESFYEGEDFSETLTRAKF EELNMDLFRSTMKPVQKVLEDSDLKKSDIDEIVLVGGSTRIPKIQQLVKEFFNGK EPSRGINPDEAVAYGAAVQAGVLSGDQDTGDLVLLDVCPLTLGIETVGGVMTKL IPRNTVVPTKKSQIFSTASDNQPTVTIKVYEGERPLTKDNHLLGTFDLTGIPPAPRG VPQIEVTFEIDVNGILRVTAEDKGTGNKNKITITNDQNRLTPEEIERMVNDAEKFA EEDKKLKERIDTRNELESYAYSLKNQIGDKEKLGGKLSSEDKETMEKAVEEKIE WLESHQDADIEDFKAKKKELE EIVQPIISKLYGSAGPPPTGEEDTAEKDEL

ACTGGCTGGC AAGATGAAGC TCTCCCTGGT GGCCGCGATG CTGCTGCTGC TCAGCGCGGC

Please replace the paragraph beginning at page 46, line 20, with the following rewritten paragraph:

SEQ ID NO: 5

Human GRP78/BiP mRNA sequence

GCGGGCCGAG GAGGAGGACA AGAAGGAGGA CGTGGGCACG GTGGTCGGCA TCGACCTGGG 121 GACCACCTAC TCCTGCGTCG GCGTGTTCAA GAACGGCCGC GTGGAGATCA TCGCCAACGA 181 TCAGGGCAAC CGCATCACGC CGTCCTATGT CGCCTTCACT CCTGAAGGGG AACGTCTGAT 241 TGGCGATGCC GCCAAGAACC AGCTCACCTC CAACCCCGAG AACACGGTCT TTGACGCCAA 301 GCGGCTCATC GGCCGCACGT GGAATGACCC GTCTGTGCAG CAGGACATCA AGTTCTTGCC 361 GTTCAAGGTG GTTGAAAAGA AAACTAAACC ATACATTCAA GTTGATATTG GAGGTGGGCA 421 AACAAAGACA TTTGCTCCTG AAGAAATTTC TGCCATGGTT CTCACTAAAA TGAAAGAAAC 481 CGCTGAGGCT TATTTGGGAA AGAAGGTTAC CCATGCAGTT GTTACTGTAC CAGCCTATTT 541 TAATGATGCC CAACGCCAAG CAACCAAAGA CGCTGGAACT ATTGCTGGCC TAAATGTTAT 601 GAGGATCATC AACGAGCCTA CGGCAGCTGC TATTGCTTAT GGCCTGGATA AGAGGGAGGG 661 GGAGAAGAAC ATCCTGGTGT TTGACCTGGG TGGCGGAACC TTCGATGTGT CTCTTCTCAC 721 CATTGACAAT GGTGTCTTCG AAGTTGTGGC CACTAATGGA GATACTCATC TGGGTGGAGA 781 AGACTTTGAC CAGCGTGTCA TGGAACACTT CATCAAACTG TACAAAAGA AGACGGGCAA 841 AGATGTCAGG AAAGACAATA GAGCTGTGCA GAAACTCCGG CGCGAGGTAG AAAAGGCCAA 901 ACGGGCCCTG TCTTCTCAGC ATCAAGCAAG AATTGAAATT GAGTCCTTCT ATGAAGGAGA 961 AGACTTTTCT GAGACCCTGA CTCGGGCCAA ATTTGAAGAG CTCAACATGG ATCTGTTCCG 1021 GTCTACTATG AAGCCCGTCC AGAAAGTGTT GGAAGATTCT GATTTGAAGA AGTCTGATAT 1081 TGATGAAATT GTTCTTGTTG GTGGCTCGAC TCGAATTCCA AAGATTCAGC AACTGGTTAA 1141 AGAGTTCTTC AATGGCAAGG AACCATCCCG TGGCATAAAC CCAGATGAAG CTGTAGCGTA 1201 TGGTGCTGCT GTCCAGGCTG GTGTGCTCTC TGGTGATCAA GATACAGGTG ACCTGGTACT

1261 GCTTGATGTA TGTCCCCTTA CACTTGGTAT TGAAACTGTG GGAGGTGTCA TGACCAAACT

